



## TWO DEGREES, ONE PATH

### TRANSFER PATHWAY GUIDE 2025-2026

Associate of Science in Secondary Education – Mathematics (TSAP) To  
Bachelor of Science in Mathematics with Secondary Education

#### ***Overview***

Completion of the following curriculum will satisfy the requirements for the Associate of Science (AS) in Secondary Education – Mathematics (TSAP) degree at Ivy Tech Community College (ITCC) and leads to the Bachelor of Science (BS) in Mathematics with Secondary Education degree at Northern Kentucky (NKU) University.

#### ***Applying to the IvyTech2NKU Program***

Students can apply to participate in the pathway program by completing the online application on the NKU transfer webpage. Students must be enrolled in at least six credit hours at Ivy Tech, enrolled in an associate degree program, plan to transfer to NKU, and maintain a minimum 2.0 cumulative GPA at Ivy Tech.

#### ***Degree Requirements for Ivy Tech***

To earn a degree at Ivy Tech a student must successfully complete the required number of credits for the degree, attain a minimum GPA of 2.0 in the required technical and general education courses, and complete at least 15 degree credits in the curriculum as a regular student of Ivy Tech.

#### ***Admission Requirements for NKU***

Students completing an associate degree with a cumulative GPA of 2.0 or higher will be accepted into NKU.

In addition, students must meet the following requirements for admission into Education. (Courses in parentheses are Ivy Tech course equivalents)

- A minimum overall GPA of 2.75
- A minimum grade of “B” in CMST 101 (COMM 101) and ENG 102 (ENGL 215)
- A minimum grade of “C” in all other pre-admission courses and required EDU and EDS

courses, which include EDU 300 (PSYC 201), EDU 305 (EDU 101), EDU 313 (EDUC 201), EDU 316 (EDUC 255), and EDS 360 (EDUC 230).

- Meet the entrance exam requirement through an approved combination of passing scores on the ACT and/or Praxis I Core Academic Skills for Educators exams
  - o ACT Comp. 22 -OR-
  - o Reading (ACT: 20 -or- Praxis I: 156) and
  - o Eng./Writing (ACT: 18 -or- Praxis I: 162) and
  - o Mathematics (ACT: 19 -or- Praxis I: 150)

ACT scores must be less than 5 years old at time of admissions semester

- Pass criminal background check
- 60 semester hours completed
- An acceptable portfolio
- A completed application to the Teacher Education program
- A completed application to Northern Kentucky University

### ***Degree Requirements for NKU***

To earn a bachelor's degree at NKU, students must complete a minimum of 120 credit hours with at least 45 credit hours numbered 300 and above. In addition, at least 25% of the credit hours required for the degree and the last 30 credit hours must be completed at NKU. Students majoring in Education must maintain a GPA of 2.75 overall and in major courses and earn a minimum grade of C in all education courses. Students must meet the pre-requisites for each course. Students wishing to be certified to teach mathematics at the secondary level must complete the requirements for the B.A. in Secondary Education along with the requirements for a B.S. in Mathematics. No minor is required for this major.

## Ivy Tech Community College of Indiana

Students must complete the following courses of an AS in Secondary Education – Mathematics (TSAP).

### Category 1: ITCC Indiana College Core Competencies

| ITCC Course             | Course or Category                                                              | Credits      | NKU Course         | Completed |
|-------------------------|---------------------------------------------------------------------------------|--------------|--------------------|-----------|
| ENGL 111                | English Composition                                                             | 3            | ENG 101            |           |
| COMM 101                | Fundamentals of Public Speaking                                                 | 3            | CMST 101           |           |
| MATH 211                | Calculus I                                                                      | 4            | MAT 129            |           |
| MATH 212                | Calculus II                                                                     | 4            | MAT 229            |           |
| SCIN 100                | Earth Science                                                                   | 4            | GNS/L 100G         |           |
| TBS XXX                 | Scientific Ways of Knowing Elective                                             | 3-5          | TBD XXX            |           |
| TBS XXX                 | Social & Behavioral Ways of Knowing<br>Elective other than HIST 101 or HIST 102 | 3            | TBD XXX            |           |
| HIST 101 or<br>HIST 102 | Survey of American History I or<br>Survey of American History II                | 3            | HIS 102<br>HIS 103 |           |
| ARTH 110 or<br>HUMA 118 | Art History or<br>Music Appreciation                                            | 3            | ART 100<br>MUS 100 |           |
|                         | <b>Subtotal General Education Core</b>                                          | <b>30-32</b> |                    |           |

TBS XXX means to be selected by Ivy Tech student

TBD XXX means to be determined by NKU based on course selected at Ivy Tech.

### Category 2: ITCC Degree Requirements for AS in Secondary Education – Mathematics (TSAP)

| ITCC Course | Course or Category                         | Credits      | NKU Course | Completed |
|-------------|--------------------------------------------|--------------|------------|-----------|
| IVYT 111    | Student Success in University Transfer     | 1            | UNV 100T   |           |
| EDUC 101    | Introduction to Teaching                   | 3            | EDU 305    |           |
| EDUC 121    | Child and Adolescent Development           | 3            | EDU 300T   |           |
| EDUC 201    | Technology in Education                    | 2            | EDU 313    |           |
| EDUC 250    | Educational Psychology                     | 3            | EDU 300T   |           |
| EDUC 255    | Multicultural Teaching                     | 3            | EDU 316    |           |
| ENGL 215    | Rhetoric and Argument                      | 3            | ENG 102    |           |
| MATH 251    | Probability/Statistics                     | 3            |            |           |
| MATH 261    | Multivariate Calculus                      | 4            | MAT 329    |           |
| MATH 264    | Differential Equations                     | 3            | MAT 325    |           |
| MATH 265    | Linear Algebra                             | 3            | MAT 234    |           |
|             | <b>Total Associate Degree Credit Hours</b> | <b>61-63</b> |            |           |

## Northern Kentucky University

Students must complete the following courses for a major in Secondary Education.

### Category 3: NKU Major Requirements for BA in Secondary Education

| NKU Course            | Course                                                                                                | Credits   | ITCC Course | Taken at ITCC |
|-----------------------|-------------------------------------------------------------------------------------------------------|-----------|-------------|---------------|
| EDU 104               | Orientation: Education Profession/Program                                                             | 1         |             |               |
| EDU 300               | Human Growth and Development                                                                          | 3         | PSYC 201    |               |
| EDU 304 or<br>EDU 354 | Reading and Writing Across the Curriculum: Middle Grades or<br>Read/Write Across Curriculum-Secondary | 3         |             |               |
| EDU 305               | Introduction to Education                                                                             | 2         | EDUC 101    | x             |
| EDU 311               | Admission Field Experience Secondary                                                                  | 2         |             |               |
| EDU 313               | Instructional Technology                                                                              | 3         | EDUC 201    | x             |
| EDU 316               | Education in a Multicultural Society                                                                  | 3         | EDUC 255    | x             |
| EDU 319               | Classroom Climate Management Secondary                                                                | 1         |             |               |
| EDU 324               | Fundamentals of Secondary Education                                                                   | 1         |             |               |
| EDU 325               | Educational Assessment Secondary                                                                      | 2         |             |               |
| EDU 333               | Teach Math in the Secondary School                                                                    | 3         |             |               |
| EDU 393               | Secondary Field Experience I                                                                          | 2         |             |               |
| EDU 396               | Secondary Field Experience II                                                                         | 2         |             |               |
| EDU 496               | Clinical Experience Secondary                                                                         | 12        |             |               |
| EDS 324               | Instructional Planning for Inclusive Secondary Classrooms                                             | 3         |             |               |
| EDS 360               | Students with Exceptionalities in School                                                              | 3         | EDUC 230    |               |
| PSY 100               | Introduction to Psychology                                                                            | 3         | PSYC 101    | x             |
| CMST 101              | Public Speaking                                                                                       | 3         | COMM 101    | x             |
| ENG 102               | Advanced College Writing                                                                              | 3         | ENGL 215    | x             |
|                       | <b>Subtotal Secondary Education Credit Hours at NKU</b>                                               | <b>38</b> |             |               |
|                       | <b>Subtotal Secondary Education Credit Hours at ITCC</b>                                              | <b>17</b> |             |               |
|                       | <b>Total Secondary Education Credit Hours</b>                                                         | <b>55</b> |             |               |

EDU 311 is waived if student provides documentation of 50 hours of field experience in an education setting. If EDU 311 is waived, student must complete EDU 334: Portfolio Development (1 credit).

Students must complete the following courses for a major in Mathematics.

**Category 4: NKU Major Requirements for BS in Mathematics**

| NKU Course                                 | Course                                                                                                     | Credits    | ITCC Course                         | Taken at ITCC |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------|------------|-------------------------------------|---------------|
| MAT 129                                    | Calculus I                                                                                                 | 4          | MATH 211                            | x             |
| MAT 229                                    | Calculus II                                                                                                | 5-6        | MATH 212                            | x             |
| MAT 329                                    | Calculus III                                                                                               | 4          | MATH 261                            | x             |
| MAT 234                                    | Linear Algebra                                                                                             | 3          | MATH 265                            | x             |
| STA 250                                    | Probability and Statistics                                                                                 | 3          |                                     |               |
| MAT 489                                    | Comprehensive Examination                                                                                  | 0          |                                     |               |
| CSC 270 or<br>CSC 260                      | Mathematics Software Programming or<br>Object-Oriented Programming                                         | 3          |                                     |               |
| MAT 302                                    | Introduction to Higher Mathematics                                                                         | 3          |                                     |               |
| MAT 345                                    | Introduction to Higher Geometry                                                                            | 3          |                                     |               |
| STA 341                                    | Statistics II                                                                                              | 3          |                                     |               |
| Select 2:<br>MAT 310<br>MAT 410<br>MAT 415 | Select two courses from the following:<br>Elementary Theory of Numbers<br>Group Theory<br>Rings and Fields | 6          |                                     |               |
| Select 1:<br>MAT 360<br>MAT 420<br>MAT 430 | Select one course from the following:<br>Numerical Analysis<br>Real Variables I<br>Complex Variables       | 3          |                                     |               |
| MAT XXX or<br>STA XXX                      | Select three additional hours of MAT or STA<br>electives at the 300 level or above                         | 3          | MATH 264<br>(equates to<br>MAT 325) | x             |
|                                            | <b>Subtotal Major Credit Hours at NKU</b>                                                                  | <b>24</b>  |                                     |               |
|                                            | <b>Subtotal Major Credit Hours at ITCC</b>                                                                 | <b>19</b>  |                                     |               |
|                                            | <b>Total Major Credit Hours</b>                                                                            | <b>43</b>  |                                     |               |
|                                            | <b>Total Baccalaureate Degree Credit Hours</b>                                                             | <b>124</b> |                                     |               |

Students pursuing a secondary education degree may also choose to concurrently complete a third major in special education. Students who enroll in the special education major are not required to take *EDS 360 Students with Exceptionalities in School* and can replace EDUC 230 with another course at Ivy Tech.

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